



<110> KARUBE, Isao SAWATA, Shinya NAGATA, Ryohei

<120> METHOD FOR DETECTING DNA WITH PROBE PNA

<130> 7887-0003-0XPCT

<140> 09/147,791 <141> 1999-03-09

<150> PCT/JP98/03077

<151> 1998-07-09

<150> JP 183710/1997

<151> 1997-07-09

<150> JP 75350/1998

<151> 1998-03-24

<160> 17

<170> PatentIn Ver. 2.1

<210> 1

<211> 540

<212> DNA

<213> Escherichia Coli 0-157

atgaagtgta tattatttaa atgggtactg tgcctgttac tgggtttttc ttcggtatcc 60 tattcccggg agtttacgat agacttftcg acccaacaaa gttatgtctc ttcgttaaat 120 agtatacgga cagagatatc gacccctctt gaacatatat ctcaggggac cacatcggtg 180 totgttatta accacacccc accgggcagt tattttgctg tggatatacg agggcttgat 240 gtctatcagg cgcgttttga ccatcttcgt ctgattattg agc@aaataa tttatatgtg 300 geegggtteg ttaataegge aacaaataet ttetaeegtt ttteagattt taeaeatata 360 tcagtgcccg gtgtgacaac ggtttccatg acaacggaca gcagttatac cactctgcaa 420 cgtgtcgcag cgctggaacg ttccggaatg caaatcagtc gtcactcact ggtttcatca 480 tatctggcgt taatggagtt cagtggtaat acaatgacca gagatgcatc cagagcagtt 540

<210> 2

<211> 18

<212> DNA

<213> Artificial Sequence

| <220> <223> Description of Artificial Sequence:synthetic DNA | |
|---|----|
| <220> <223> Complementary to nucleotides 402-419 of SEQ ID NO:1 | |
| <400> 2 tgcagagtgg tataactg | 18 |
| <210> 3 <211> 21 <212> DNA <213> Artificial Sequence | |
| <220> <223> Description of Artificial Sequence:synthetic DNA | |
| <220> <223> Complementary to nucleotides 402-422 of SEQ ID NO:1 | |
| <400> 3 cagttatacc actctgcaac g | 21 |
| <210> 4 <211> 21 <212> DNA <213> Artificial Sequence | |
| <220> <223> Description of Artificial Sequence:synthetic DNA | |
| <220> <223> nucleotides 301-321 of SEQ ID NO:1 | |
| <400> 4 gccgggttcg ttaatacggc a | 21 |
| <210> 5 <211> 21 <212> DNA <213> Artificial Sequence | |
| <220> <223> Description of Artificial Sequence:synthetic DNA | |

```
<220>
<223> nucleotides 28-48 of SEQ ID NO:1
<400> 5
ctgtgcctgt tactgggttt t
                                                                    21
<210> 6
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic DNA
<223> nucleotides 423-443 of SEQ ID NO:1
<400> 6
gaacgttcca gcgctgcgac a
                                                                    21
<210> 7
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:synthetic DNA
<220>
<223> nucleotides 188-208 of SEQ ID NO:1
<400> 7
ttaaccacac cccaccgggc a
                                                                    21
<210> 8 .
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:synthetic DNA
<220>
<223> nucleotides 160-180 of SEQ ID NO:1
<400> 8
```

| | 21 |
|--|----|
| <210> 9 <211> 21 <212> DNA <213> Artificial Sequence | |
| <220> <223> Description of Artificial Sequence:synthetic DNA | |
| <220> <223> nucleotides 53-73 of SEQ ID NO:1 | |
| <400> 9 cggtatccta ttcccgggag t | 21 |
| <210> 10 <211> 15 <212> DNA <213> Vibrio parahaemolyticus | |
| <400> 10 aagttattaa tcaat | 15 |
| <210> 11 <211> 15 <212> DNA <213> Vibrio parahaemolyticus | |
| <400> 11 tttttattat atccg | 15 |
| <210> 12 <211> 15 <212> DNA <213> Vibrio parahaemolyticus | |
| <400> 12 cccagttaag gcaat | 15 |
| <210> 13 <211> 15 <212> DNA <213> Salmonella enteritidis | |

| ggcaaaccgt attac | 15 |
|---|----|
| <210> 14 <211> 15 <212> DNA <213> Bordetella pertussis | |
| <400> 14 ccaaagtatt tccct | 15 |
| <210> 15 <211> 15 <212> DNA <213> Vibrio cholerae | |
| <400> 15 aattcgggtt aattg | 15 |
| <210 > 16 <211 > 15 <212 > DNA <213 > Escherichia coli 0-157 | |
| <400> 16 gggcgttatg ccgta | 15 |
| <210> 17 <211> 15 <212> DNA <213> Escherichia coi 0-157 | |
| <400> 17 | 15 |